National Association of
College and University
Business Officers

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Summary Results of the 1981 NACUBO Comparative Performance Study and Investment Questionnaire

Typical Portfolio of Reporting Institutions—1981

Annual return for year ended June 30, 1981	14.64%
Annual return over prior three years	12.49%
Annual return over prior five years	9.06%
Annual return over prior ten years	6.45%
Asset composition as of June 30, 1981	
Stocks	57.6%
Bonds	25.0%
Cash equivalents	12.6%
Real estate	2.2%
Miscellaneous	2.6%
Portfolio beta coefficient—based on prior ten years' data	0.72
Stock turnover during prior year	28.0%
Bond turnover during prior year	15.8%
Median endowment principal per FTE student (independent institutions)	$14,600
Median endowment principal per faculty member (independent institutions)	$169,000

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Preface

This summary report contains information on the investments of college and university endowment funds.

The NACUBO Comparative Performance Study (CPS) has been prepared annually since 1971. It initially provided participating institutions with comparative performance data on their investment pools; in recent years, the CPS has been expanded to include a detailed investment questionnaire, which covers other pertinent information relating to endowment funds and their management. Each year, considerable information is published in the *detailed* CPS report, which includes a variety of data of interest to participating institutions. The *summary* CPS report is designed for those who are interested in and concerned about endowment funds, but who prefer a condensed summary of findings.

Each participating institution has been provided with one copy of the detailed CPS report. Information in that report, coded for confidentiality, can be referred to when making comparisons to the larger endowment data base. Copies of the detailed CPS report are available from NACUBO, One Dupont Circle, Washington, D.C. 20036, at $25 each for NACUBO members and $50 each for nonmembers; all orders must be prepaid.

Members of the Investments Committee hereby convey their thanks to the many persons who made this study possible. These include business officers who voluntarily supplied data and answered the questionnaire; Bruce M. Dresner, of Dartmouth College, who served as survey coordinator in producing the detailed report; and Dartmouth College, which provided the use of its computer.

Investment Performance

NACUBO compiles data on endowment funds each year. A detailed investment questionnaire is sent in early fall to all endowed institutions of higher education that are known to be interested in the CPS. Timing of the questionnaire is based on a June 30 fiscal year-end, and responses are requested by the end of the calendar year in order to allow institutions to use information prepared as part of their fiscal year-end financial reporting. The ability of NACUBO to report in a timely fashion in the Comparative Performance Study is largely determined by the responsiveness of the participants in returning completed questionnaires.

In the 1981 study, 192 institutions participated and supplied the market value of their endowments. These institutions had endowment funds of approximately $17.8 billion. The total for all U.S. college and university endowment funds was $20.7 billion, according to the most recent (1980) HEGIS data (one year's difference between NACUBO and HEGIS data). A list of participating institutions, ranked by order of endowment size, is provided in table 1.

Table 1

Endowment and Life Income Fund Assets
Ranked by Endowment Market Value at June 30, 1981

(000 omitted)

	Institution	Life Income Funds	Endowment Funds
1	Harvard University	$ 38,370	$ 1,713,350
2	The University of Texas System	3,816	1,485,090
3	Princeton University	7,805	920,922
4	Yale University	6,800	792,600
5	Stanford University	89,395	598,990 (A)
6	Columbia University	4,600	590,400
7	Massachusetts Institute of Technology	10,654	500,237
8	University of Chicago	12,900	397,100
9	Rice University	11,619	376,865
10	Cornell University	26,535	360,441
11	Northwestern University	13,838	320,552
12	New York University	1,709	276,351 (A)
13	Rockefeller University	393	270,568
14	Washington University	6,576	266,579
15	Emory University	0	252,859 (A)
16	Johns Hopkins University	5,643	242,430
17	Dartmouth College	20,005	234,055
18	University of Pennsylvania	7,798	232,667
19	University of Notre Dame	4,242	218,243
20	California Institute of Technology	28,239	202,090
21	University of Virginia	263	179,697
22	Vanderbilt University	26,845	174,715
23	Duke University	7,095	153,950
24	McGill University	0	153,200
25	University of Delaware	101	143,996
26	Case Western Reserve University	12,018	142,286
27	Brown University	4,686	139,484
28	Wesleyan University	749	134,395
29	Wellesley College	9,294	133,192
30	Carnegie-Mellon University	2,407	132,468
31	Smith College	0	129,126

	Institution	Life Income Funds	Endowment Funds
32	Swarthmore College	$ 3,762	$ 117,066
33	Williams College	2,952	117,044
34	Southern Methodist University	819	116,855 (M)
35	University of Michigan	7,148	116,482
36	University of Minnesota	172	113,867
37	University of Pittsburgh	323	113,216
38	Vassar College	10,546	104,834
39	Rensselaer Polytechnic Institute	4,814	103,943
40	University of Cincinnati	3,975	103,612
41	Oberlin College	3,377	103,102
42	Berea College	3,295	97,534
43	Amherst College	2,581	95,009
44	University of Richmond	487	88,133
45	Baylor University	11,290	87,500
46	Grinnell College	4,047	85,552
47	Ohio State University	781	84,794
48	Loyola University of Chicago	200	83,615
49	Wake Forest University	775	77,589
50	Lehigh University	5,206	72,980
51	Pomona College	35,950	72,530
52	Brandeis University	4,242	72,528
53	Georgetown University	1,818	71,844
54	Lafayette College	0	71,558
55	Middlebury College	2,092	70,211
56	Rochester Institute of Technology	1,273	64,656
57	Carleton College	2,625	61,966
58	State University of New York	26	61,478
59	Mount Holyoke College	3,270	61,449
60	Boston University	1,790	60,898
61	Wabash College	8,970	59,589
62	Thomas Jefferson University	620	58,995
63	Syracuse University	8,596	58,816
64	Academy of the New Church	0	55,797
65	Bryn Mawr College	603	55,521 (M)
66	Bowdoin College	3,351	55,303
67	University of Illinois	9,542	52,672
68	Earlham College	616	49,719
69	Hamilton College	1,615	49,658
70	University of Miami	4,423	47,707 (M)
71	Tufts University	853	47,249
72	Trinity College (Connecticut)	667	47,181
73	Occidental College	6,988	46,555
74	Baylor College of Medicine	0	45,470
75	Cooper Union	159	44,393
76	Colorado College	0	44,181
77	University of North Carolina	646	43,605
78	University of Wisconsin System	0	43,267
79	Rutgers, The State University of New Jersey	0	42,601
80	Worcester Polytechnic Institute	964	41,547
81	Bucknell University	496	41,254
82	Radcliffe College	975	40,347
83	Colgate University	7,263	39,653 (M)
84	Haverford College	917	38,179
85	Southwestern University	0	37,915
86	Hampton Institute	0	36,656
87	Agnes Scott College	0	35,487
88	Drew University	0	34,062
89	University of Missouri	2,031	34,027
90	University of Vermont	275	32,006
91	Whitman College	5,679	31,760
92	Claremont Men's College	11,611	31,516

	Institution	Life Income Funds	Endowment Funds
93	Colby College	$ 2,174	$ 29,367
94	University of Santa Clara	3,505	28,402
95	Davidson College	443	27,656
96	Lawrence University	0	27,369
97	Austin College	0	27,152 (M)
98	Ohio University	0	27,050
99	University of Denver	2,319	27,014
100	Columbia University Teachers College	220	26,465 (M)
101	Barnard College	180	25,880
102	University of Alabama System	0	25,795
103	Berry College	40	25,535
104	Rhode Island School of Design	56	24,556
105	University of Tennessee - Knoxville	9,511	24,165
106	College of Wooster	0	24,033
107	Simmons College	0	22,014
108	Denison University	3,361	21,923
109	George Washington University	0	21,834
110	Spelman College	0	21,610
111	Sweet Briar College	177	20,946
112	University of Maryland	0	20,714
113	University of Wisconsin Foundation	3,713	20,281
114	Marquette University	79	19,827
115	Cornell College	0	19,280
116	Hendrix College	1,530	18,926 (J)
117	Ohio Wesleyan University	1,759	18,849
118	Pennsylvania State University	1,586	18,320
119	Wheaton College (Massachusetts)	344	17,656
120	Dickinson College	1,470	17,625
121	Clark University	1,649	17,289
122	Coe College	0	16,886
123	University of Utah	463	16,883
124	Reed College	2,170	16,786
125	Wittenberg University	5,631	16,457
126	Alma College	98	16,455
127	Franklin & Marshall College	2,566	16,218
128	Michigan State University	171	15,798
129	Furman University	2,237	15,762
130	University of Tennessee - Chattanooga	42	15,614
131	Oregon State Board of Higher Education	0	15,377
132	University of Puget Sound	1,562	15,088 (A)
133	Baldwin-Wallace College	673	14,894
134	Kalamazoo College	867	14,805
135	Wentworth Institute of Technology	0	14,577
136	University of Arizona	0	14,367
137	Connecticut College	0	14,046
138	Allegheny College	538	13,659
139	University of Tulsa	101	13,537
140	Indiana University	1,016	13,452
141	Norwich University	92	12,849
142	Temple University	0	12,722
143	Endowment Association of College of William and Mary	221	12,204
144	University of Maine	0	11,983
145	Drake University	125	11,875 (M)
146	University of Dayton	0	11,403
147	Washburn College	0	11,403
148	Mercer University	297	11,357
149	Whittier College	575	10,999
150	Kenyon College	464	10,856
151	Georgia Institute of Technology	0	10,810
152	Hobart & William Smith Colleges	160	10,704

	Institution	Life Income Funds	Endowment Funds
153	University of Iowa Foundation	$ 3,075	$ 9,740
154	Muhlenberg College	0	9,045
155	University of Arkansas	285	9,005
156	St. Norbert College	0	8,659
157	Saint Mary's College (Notre Dame)	0	8,645
158	Wells College	338	8,500
159	North Carolina State University	0	8,408
160	Alfred University	176	8,089
161	Ohio Northern University	0	7,684
162	Babson College	178	7,441
163	Doane College	370	7,333
164	Rollins College	177	7,314
165	Skidmore College	973	7,288
166	University of Nebraska	0	7,148
167	University of Scranton	0	6,781
168	Clarkson College of Technology	239	6,603
169	Augustana College	875	6,527
170	Hope College	3,394	6,490
171	Carroll College	309	6,102
172	Moravian College	142	6,027
173	Loras College	5	6,013
174	University of Evansville	67	5,936
175	The American University	0	5,818
176	College of William and Mary	0	5,529
177	Washington State University	45	5,351
178	Medical College of Pennsylvania	282	5,212
179	University of Akron	0	3,940
180	University of Oregon Development Foundation	0	3,683
181	Philadelphia College of Textiles and Science	0	3,599
182	Canisius College	95	3,538
183	Chapman College	38	3,157 (M)
184	University of Tampa	74	2,928
185	Trinity College (District of Columbia)	72	2,639
186	Western Michigan University	843	2,564
187	Arizona State University	531	2,325
188	Newberry College	0	2,055
189	Eastern Michigan University	49	1,938
190	University of Mississippi	0	1,850
191	University of Connecticut	0	1,833
192	Monmouth College	0	1,472
	TOTAL	$628,708	$16,929,840

(A) = Figures are as of August 31, 1981
(J) = Figures are as of July 31, 1981
(M) = Figures are as of May 31, 1981

Summary of Performance of Endowment Funds

The purpose of the NACUBO Comparative Performance Study is to aid administrators in evaluating their investment pool's performance. It is believed that measuring comparative performance among pools with similar characteristics, objectives, and risk levels can add an important, useful dimension in reviewing the investment results achieved with respect to meeting performance goals.

- For the year ended June 30, 1981, the 209 college and university pools participating in this study had an average rate of return of 14.6%. This rate of return exceeds the 10.7% expected total return earned by a composite of the S&P 500 Index, the Lehman Brothers-Kuhn Loeb Bond Index, and the average treasury bill rate using the same asset composition as the average investment pool (55.4% in equities, 26.7% in long-term bonds,

13.2% in cash and equivalents, 2.1% in real estate, and 2.6% in other assets).

- The study also shows that for the three-year period ended June 30, 1981, the average rate of return of the collage and university pools of 12.5% exceeded the composite market index of 10.3%. And, for the five-year period ended June 30, 1981, the average return for the investment pools of 9.1% was higher than that earned by the composite index, which was 7.1%.

- In terms of investment objectives, those pools with a total rate of return objective outperformed those with balanced and income objectives. This is true for all measured periods ended June 30, 1981. The total rate of return pools, on average, were 62% invested in equities over the past five years while the balanced pools were only 51% invested in equities.

- The study reveals that, on average, the largest pools (over $50 million) outperformed the middle pools ($10-$50 million), which outperformed the smallest pools during the past year, as well as for the three-, five-, and ten-year periods measured. For the last five years the groups had average equity positions of 60%, 56%, and 49% for the largest, middle, and smallest pools, respectively.

Table 2

Average Performance by Period

	Period Ended June 30, 1981			
	One Year	Three Years	Five Years	Ten Years
All investment pools measured	14.64%	12.49%	9.06%	6.45%
By investment objective				
Total return pools	18.19	14.19	10.00	6.85
Balanced or income pools	12.36	11.44	8.47	6.17
By size				
Over $50 million	16.61	14.37	9.92	7.19
$10 to $50 million	15.27	12.76	9.37	6.38
Under $10 million	11.52	9.99	7.57	5.45
Comparative indexes				
Dow Jones Industrial Average	19.39	12.53	5.10	5.79
S&P 500 Index	20.86	17.12	10.01	7.19
Salomon Brothers Bond Index	−14.11	−4.05	.06	3.12
Lehman Brothers-Kuhn Loeb Bond Index	− 9.53	−1.91	1.64	n/a
Other benchmarks				
The Common Fund for Equity Investments	29.49	22.92	16.44	8.15
The Common Fund for Bond Investments	− 9.90	−.59	n/a	n/a
Inflation benchmarks				
Consumer price index	9.52	11.59	9.79	8.37
Higher education price index	9.77	9.13	8.10	7.36

- Those investment pools managed externally during the years ended June 30, 1981 and 1980, performed, on average, about two percentage points better than those managed internally. In 1979, results were about equal, and for each of the two previous years, the internally managed pools outperformed those managed externally.

- Investment pools with higher than average bond turnover rates outperformed, on average, those pools having lower turnover rates. Pools with the highest and lowest equity turnover performed equally.

- Investment pools outperformed inflation as measured by the Consumer Price Index (CPI) and the Higher Education Price Index (HEPI) for the one- and three-year periods ended June 30, 1981; outperformed only the HEPI for the five-year period; and outperformed neither the CPI nor the HEPI for the ten-year period.

Because endowment funds are invested on a

long-term basis, it is important to consider investment returns beyond just one year. In Table 2, information is provided on the performance of endowment funds over a series of different time periods. The appendix provides a detailed listing of the performance of all participating institutions, with funds coded for confidentiality.

Although investment performance figures are important and meaningful, this information can be both misinterpreted and overemphasized. Modern investment theory suggests that risk and return are related, and that the amount of return obtained in an investment portfolio is directly influenced by the degree of risk taken. This means that while one institution might achieve a higher (or lower) return than another, this return typically results from a combination of actions, including the allocation of investments among different types of assets, the degree of risk taken, the emphasis on different types of assets within each investment category (e.g., high-yield stocks vs. growth stocks, high-quality vs. low-quality bonds, etc.), and the selection of particular stocks, bonds, and other investments.

While one year is too short a period from which to draw any significant conclusions regarding performance, for the year ended June 30, 1981, 25% of the 209 pools in the CPS outperformed the Dow Jones Industrial Average (the 192 institutions provided data on a total of 209 separate pools). This widely followed benchmark should not be the sole measure used to compare the performance of the average investment pool. A better measure, but still not completely representative for comparative purposes, is the S&P 500 Index. Thirty-six percent of the 209 pools outperformed the S&P 500 in 1980-81, which was a period of increasing stock prices. This is not surprising, since most pools maintain a balanced investment mix, and are not totally invested in stocks. All of the endowment investment pools outperformed both the Salomon Brothers Bond Index and the Lehman Brothers-Kuhn Loeb Bond Index. This too is not surprising, due to the large stock component of these funds and to the short-term liquid asset cash position of most pools after a year of unusually high money market yields. For those few pools totally invested in either common stocks or long-term bonds, a direct comparison to the S&P 500 Index or either bond index, respectively, is more valid.

What should be of interest and concern to trustees and those administrators responsible for an investment pool is the return achieved from a blend of market indexes that mimics that of their own pool. In the case of the average pool, this means the return achieved as a result of the investment of its 55% stock component, 27% bond component, 13% cash component, 2% real estate component, and 3% miscellaneous assets component. On this basis, the one-year return of 14.64% for all pools appears favorable compared with the return of 10.73%, which might be expected on the asset components of the pool shown in Table 3.

Table 3

Estimated Asset Component Return of All Investment Pools for the One-Year Period Ended June 30, 1981

Asset Component	Index	Fiscal 1980-81 Total Return Percentage	Average Investment Pool Asset Component	Expected Total Return
Stocks	S&P 500	20.86%	55.4%	11.56%
Bonds	Lehman-Kuhn Loeb	−9.53	26.7	−2.54
Cash	Average Treasury Bill	12.98	13.2	1.71
Real Estate	n/a	0	2.1	0
Miscellaneous	n/a	0	2.6	0
Total			100.0%	10.73%

Asset Composition

The decision as to what should be the asset composition (or amount invested in stocks, bonds, etc.) of the endowment fund is typically a policy action dictated by each institution's governing board or investment committee. Sometimes this decision is determined in conjunction with the advice of an institution's portfolio manager. Table 4 shows the asset composition of reporting investment pools as of June 30, 1981. The average pool in the 1981 CPS has about 58% of its assets invested in stocks. Some endowment funds are almost totally invested in stocks, others hold a balance on investment assets, and a few have heavy weightings of bonds or real estate. Both the expected return and volatility of any given investment portfolio will be a function of its asset composition, and each institution will typically establish a permissible allocation of assets as a function of its own need for income and growth of principal. As an example, a need for predictable, stable income will require of investments a certain percentage in bonds, although investment in the stock market might produce a higher total return.

Table 4

Asset Composition of Investment Pools by Objective and Size
At June 30, 1981

		By Investment Objective		By Size		
	All Pools	Total Return	Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Stocks	57.6%	64.5%	53.2%	61.9%	57.6%	52.6%
Bonds	25.0	19.4	28.5	21.3	23.8	30.9
Cash	12.6	12.1	12.9	11.0	12.4	14.6
Real estate	2.2	1.3	2.8	2.9	2.9	.6
Miscellaneous	2.6	2.7	2.6	2.9	3.3	1.3
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

NACUBO compares the asset composition of investment pools from year to year and monitors changes in concentration. The net change in asset composition results from a combination of two factors: the general change in stock and bond prices and a policy shift in investment assets. Using the change in market indexes, an expected change in the value of assets can be computed. When actual compositions are reported for the following year, a comparison can then be made between the expected change and what actually occurred, with net differences computed that can be assumed to have occurred due to policy decisions, such as a change in investment strategy. For the year ended June 30, 1981, endowment funds in general again exhibited a shift in emphasis, increasing bonds 2.4% while decreasing stocks 2.0%, as shown in Table 5.

A characteristic related to the composition of the portfolio is diversification of the securities held within each asset category. Some investment portfolios are quite diversified and reflect stock holdings that mirror the market in general. Other investment pools ordinarily concentrate investments into particular industries or segments of the marketplace. Most investment pools are well diversified in their stock and bond holdings: the typical endowment portfolio holds about 50 different common stock names, with even more names included as the size of the portfolio increases; about 25 different bond names are included in the typical endowment portfolio.

Risk Measurement and Return

According to modern investment theory, risk and return are directly related. There are several different techniques to measure risk. One technique assumed to be a proxy for risk is to compare the fluctuation of the portfolio to that of the stock market in general, typically using the S&P 500 Index as the market. This compari-

Table 5

Change in Asset Composition: 1974 through 1981
(Percentage Change — Year Ended June 30)

	1974	1975	1976	1977	1978	1979	1980	1981	Total
Stocks	−4.0%	−1.2%	−2.2%	−1.1%	−4.8%	−3.3%	−2.3%	−2.0%	−20.9%
Bonds	1.3	3.9	4.2	0	0.6	1.3	2.6	2.4	16.3
Cash	3.0	−2.9	−1.7	1.0	−4.2	1.9	−0.6	−0.7	4.2
Real Estate	n/a	n/a	n/a	n/a	n/a	n/a	0.4	0.2	0.6
Miscellaneous	−0.3	0.2	−0.3	0.1	0	0.1	−0.1	0.1	−0.2

son generates a measure called the "beta coefficient," which indicates the percentage fluctuation that can be expected and therefore predicted, based on the relative performance of the market. A beta of 1.00 means that the portfolio is just as volatile as the market in general and should be expected to move in unison with the market, if the assets in the portfolio are well diversified. If the market goes up 10%, then the pool should be expected to go up 10%. A beta of 1.10 means that the portfolio is 10% more volatile than the market, while a beta of 0.90 indicates that the portfolio is 10% less volatile, and therefore should not perform as well as the market in a period of rising prices, nor lose as much when market prices decline. In other words, if a specific portfolio is more volatile and therefore is taking more risk, it is expected that this portfolio should have a return that is greater than the market in general. A higher than average return may not mean that the portfolio has achieved an extraordinary success, but rather it might be simply the return that should be expected for the degree of risk taken. If a specific portfolio has an incremental return greater than what might be predicted by the beta coefficient, the excess return can be explained as the value added by management. Beta coefficients have been computed for investment pools in the 1981 CPS. The average beta for all pools is .72 for the ten-year period ended June 30, 1981.

In Table 6, beta coefficients are summarized for investment pools in the study. College and university endowment funds appear to be invested for less volatility and risk than the market as a whole. One would expect their performance to be below that of the stock market as a whole in a period of a rising market, as was the case in fiscal 1975, 1976, 1979, 1980, and 1981, and above the stock market in a period of a declining market, as was the case in fiscal 1977 and 1978.

Table 6

Beta Coefficients

	Ten Years Ended June 30, 1981
All investments pools	.72
By investment objective	
Total return pools	.79
Balanced pools	.66
By size	
Over $50 million	.77
$10 to $50 million	.71
Under $10 million	.65
Comparative indexes	
Dow Jones Industrial Average	.81
Salomon Brothers Bond Index	.05
S&P 500 Index	1.00

Stock and Bond Turnover

Investment managers buy and sell securities. Some observers of the marketplace believe that very actively traded portfolios, with high turnover and therefore high transaction costs, will produce a lower total return in the long run. NACUBO has been monitoring turnover for the last seven years; for 1981, the stock turnover of the typical endowment fund was 28.0% of the total value of stock invested, the highest rate since NACUBO began gathering this data in 1975. On average, bond turnover was about 15.8%, with the larger pools having higher turnover. Data accumulated to date do not indicate any correlation, positive or negative, between turnover and performance for endowments funds. It is observed that, in general, endowment funds have lower turnover than other investment pools.

Endowment Characteristics

As part of the ongoing CPS, NACUBO has endeavored to build a data base of information on endowment funds and endowment *wealth*.

One of the most important subjects indentified by administrators and others interested in colleges and universities is endowment growth and endowment adjusted for inflation, or "real" endowment growth. The increased size of endowment funds in 1981 appears to be the result of the addition of new gifts to endowment and of appreciation in equity securities offsetting depreciation in the bond security markets. A crude approximation of endowment growth can be made for the eight-year period ending June 30, 1981. This calculation is based on information received from prior NACUBO questionnaires and indicates that, as a group, endowment funds at June 30, 1981, have increased about 39% since June 30, 1973. However, in real terms—when inflation is taken into account—endowment funds have actually declined about 32%. To help put this into perspective, Table 7 compares the S&P 500, the Dow Jones Industrial Average, the Salomon Brothers High-Grade Bond Index, and endowment funds both before and after inflation. The Consumer Price Index (CPI) and the Higher Education Price Index (HEPI) were used to adjust for inflation.

Table 7

Seven-Year Appreciation Comparison Of Indexes and Endowment Before and After Inflation

	6/30/73	6/30/74	6/30/75	6/30/76	6/30/77	6/30/78	6/30/79	6/30/80	6/30/81	Eight-Year Percentage Change
Dow Jones Industrial Average	891.71	802.41	878.99	1,002.78	916.30	818.95	841.98	867.92	976.88	9.55%
S&P 500 Index	104.26	86.00	95.19	104.28	100.48	95.53	102.91	114.24	131.24	25.88
Salomon Brother High-Grade Bond Index	93.70	80.53	85.26	86.82	92.43	84.64	83.15	73.23	56.43	—39.78
Endowment funds	100.00	83.30	91.05	98.52	102.36	103.79	112.09	122.85	139.31	39.31
Real endowment based on CPI*	100.00	78.22	78.15	78.95	77.24	73.54	68.94	66.11	68.46	—31.54
Real endowment based on HEPI*	100.00	77.78	78.28	79.46	77.52	73.67	73.80	73.60	76.22	—23.78

* CPI (Consumer Price Index) and HEPI (Higher Education Price Index) figures from D. Kent Halstead.

Table 7 clearly identifies why the rebound from the levels of the 1974 bond and equity markets leaves educational institutions far from whole. That is, $100 of endowment at June 30, 1973, would have the purchasing power at June 30, 1981, of only $68.46 (based on the CPI) and $76.22 (based on the HEPI). Stated another way, endowment would have to rise an additional 45% (or 30%) to maintain 1973 purchasing power in 1981. This devastating loss in purchasing power is being felt throughout the college and university world and helps explain some of the more recent fiscal problems being experienced by many endowed institutions, especially those that rely more

heavily on their endowment to meet current operating expenses.

For independent institutions, questions were asked regarding endowment support for faculty and full-time equivalent (FTE) students. Table 8 summarizes these data.

Because each college and university and its alumni are unique, it is often difficult to draw analogies relating to gift-giving among institutions. It is hoped that data gathered over a long period may be useful in identifying trends. Data on gifts to endowment are included in the detailed CPS.

Table 8

All Independent Institutions — Endowment Support

	Average Institution	Median of All Participants
Endowment principal per FTE student	$ 23,550	$ 14,600
Endowment principal per faculty member	251,650	169,000
Endowment income per FTE student	1,200	775
Endowment income per faculty member	13,625	8,775
Gifts to endowment as percentage of market value	n/a	3.4%

Appendix: Average Annual Total Return Performance of All Pools for the Period Ended June 30, 1981

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	78	D	35.42 %	1	30.31 %	1	17.30 %		N/A %
2	C11	84	E	33.97		N/A		N/A		N/A
3	E25	88	D	33.65	6	23.70	4	16.50	9	9.41
4	E5	82	A	32.82	2	25.21	5	16.43	18	8.23
5	C40	74	E	32.26	4	24.01	19	13.35	2	12.58
6	C63	80	C	31.26	5	23.87	3	17.03	17	8.70
7	E49	65	C	31.23	32	16.31	31	11.92	74	5.93
8	E54	73	C	31.21	3	24.17	2	17.10	14	8.82
9	E75	73	B	31.06	18	18.89	23	12.87	4	10.26
10	C74	12	D	30.38	22	18.50	20	13.25	6	10.09
11	E34	74	A	30.15	8	23.09	10	14.38	27	7.80
12	E50	45	C	29.57	33	16.26	40	11.02	115	4.60
13	C66	64	D	29.50	12	21.23	11	14.16		N/A
	COM-FDEQ	90	A	29.49		22.96		16.44		8.15
14	E12	42	F	27.74	9	22.36	25	12.76		N/A
15	E15	55	B	27.72	59	14.27	87	8.86	66	6.09
16	E16	64	D	26.85	36	16.15	35	11.54	35	7.20
17	C76	60	D	26.53	82	12.80	89	8.76	22	7.98
18	C44	58	F	26.38	37	16.03	18	13.36	49	6.65
19	E30	65	A	25.92	21	18.56	32	11.74	37	7.03
20	E26	76	C	25.85	7	23.14	8	14.82	31	7.38
21	E98	52	B	25.26	27	17.35	38	11.22	58	6.24
22	E58	72	C	25.21	64	14.14		N/A		N/A
23	E11	70	A	23.95	16	19.32		N/A		N/A
24	C28	78	C	23.57	19	18.75	16	13.50		N/A
25	E20	53	C	22.98	35	16.17	53	10.31	21	8.02
26	C24	78	D	22.82	28	16.92	22	12.89		N/A
27	E40	68	A	22.67	30	16.58	60	10.10	47	6.69
28	E48	54	E	22.21	50	15.05	17	13.39		N/A
29	C14	75	C	22.16	11	21.48		N/A		N/A
30	E36	54	A	21.86	26	17.88	30	12.29	39	6.95
31	C65	56	C	21.68	55	14.68	43	10.93	13	8.94
32	E105	67	F	21.59		N/A		N/A		N/A
33	C43	71	F	21.58	60	14.23	47	10.66		N/A
34	E6	57	B	21.44	61	14.20	110	8.03	32	7.33
35	E43	74	C	21.40	13	20.84	24	12.82	8	9.86
36	E45	68	A	20.99	25	17.89	28	12.48	26	7.86
	SP500			20.86		17.12		10.01		7.19
37	C100	57	D	20.80	134	10.24	98	8.45		N/A
38	E64	54	E	20.77	57	14.56	33	11.59	110	4.79
39	E81	55	D	20.72	70	13.71	81	8.92	104	4.88
	SP-IND			20.63		17.51		9.73		7.13

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
40	C31	58	B	20.63 %	98	11.96 %	96	8.51 %		N/A %
41	E93	67	B	20.53	39	15.86	79	9.15		N/A
42	E4	64	D	20.50	86	12.75	107	8.18	93	5.30
43	E19	78	B	20.43	14	20.39	12	14.04	30	7.56
44	E52	73	D	20.36	42	15.44	63	9.80	75	5.91
45	C55	76	A	20.35	65	14.13	42	10.94	16	8.72
46	C35	60	C	20.30	17	19.11	7	15.27		N/A
47	C15	55	A	20.14	34	16.18	34	11.55	69	6.03
48	E42	56	E	20.13	110	11.34	50	10.48	72	5.95
49	E33	77	A	20.03	29	16.72	59	10.14	51	6.48
50	C62	80	F	19.66	106	11.55	72	9.38		N/A
51	C18	49	D	19.54	47	15.20	13	13.93	5	10.19
52	E62	66	D	19.53	72	13.49	62	9.90	52	6.48
	D-JONES			19.39		12.53		5.10		5.79
53	E27	65	B	19.36	56	14.60	83	8.89	63	6.09
54	C82	70	B	19.04	48	15.13	51	10.43	114	4.61
55	C25	73	A	18.98	24	18.15	39	11.09	15	8.76
56	E8	60	A	18.95	46	15.27	44	10.85	55	6.35
57	E61	63	D	18.84	129	10.33		N/A		N/A
58	E1	55	A	18.81	58	14.32	56	10.24	98	5.11
59	C45	65	D	18.69		N/A		N/A		N/A
60	C97	47	E	18.34	185	5.66	178	3.37	77	5.89
61	E24	61	D	18.24	117	10.77	64	9.62		N/A
62	C56	59	A	18.06	75	13.27	57	10.18	54	6.40
63	E10	65	D	17.72	97	11.97	131	7.25	111	4.66
64	E65	49	C	17.50	93	12.24	52	10.42	68	6.04
65	C93	64	D	17.31		N/A		N/A		N/A
66	E46	80	A	17.26	44	15.33	91	8.61	44	6.78
67	C42	73	B	17.18	51	14.99	73	9.35	81	5.78
68	C68	60	A	17.07		N/A		N/A		N/A
69	E21	75	A	17.01	49	15.11	58	10.16	48	6.67
70	E101	72	D	16.95	38	15.91	36	11.31		N/A
71	E37	58	B	16.71	31	16.49	46	10.69	24	7.90
72	E63	70	A	16.62	62	14.19	71	9.42	65	6.09
73	C77	92	A	16.53	20	18.72	27	12.58	7	9.94
74	C70	62	D	16.46	127	10.41	88	8.79	45	6.78
75	E29	60	A	16.42	67	13.79	54	10.31	117	4.55
76	C99**	95	B	16.34	53	14.75	6	16.28	1	27.61
77	E73	53	A	16.25	116	10.78	95	8.52	76	5.90
78	C13	56	D	16.22	63	14.17	45	10.82	11	9.03
79	C57	51	C	16.13	111	11.33	136	7.16	113	4.62
80	C98	59	D	16.13	43	15.37	14	13.93	3	12.36
81	E38	71	A	16.08	45	15.31	37	11.28	20	8.05
82	C23	52	E	16.03	10	21.71	9	14.44	128	3.80
83	E74	43	D	15.98	73	13.32	142	6.97		N/A
84	E91	54	E	15.86	74	13.29	97	8.50	97	5.17
85	E53	69	B	15.71	54	14.74	41	10.95	23	7.92
86	C71	57	D	15.63		N/A		N/A		N/A
87	E51	54	C	15.62	41	15.56	49	10.51	25	7.88
88	E56	61	A	15.50	68	13.76	85	8.88	59	6.20
89	E18	71	A	15.44	104	11.57	150	6.56	87	5.47
90	E55	66	C	15.30		N/A		N/A		N/A

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
91	E72	58	A	15.12 %	89	12.60%	67	9.57 %	53	6.43%
92	C54	40	A	14.86	23	18.16	15	13.58	10	9.26
93	C2	53	B	14.86	83	12.78	101	8.42	28	7.72
94	E79	73	D	14.77	66	13.92	70	9.42	40	6.91
95	E68	62	C	14.29	80	12.83	78	9.16	99	5.03
96	C72	46	A	14.24	90	12.50	68	9.54	12	8.99
97	E69	59	B	14.14	147	9.46	180	2.78	125	4.07
98	C21	38	C	14.08	140	10.07	162	5.57	129	3.53
99	C34	55	C	14.07	95	12.21	99	8.44	91	5.32
100	E66	64	C	14.07	88	12.63	125	7.50		N/A
101	C22	49	A	14.05	77	13.10	74	9.34	61	6.16
102	E76	67	F	14.03	87	12.74	105	8.21		N/A
103	C46	40	D	13.93	155	9.09	117	7.70		N/A
104	E108	60	C	13.93	119	10.75	155	6.45	57	6.29
105	C95	40	E	13.77	96	12.13	76	9.22	46	6.76
106	C94	20	D	13.74	109	11.35	29	12.33		N/A
107	C58	67	D	13.66	78	12.92	119	7.67	95	5.22
108	C52	48	F	13.63	130	10.33	121	7.63	64	6.09
109	C38	38	C	13.59	148	9.33	65	9.60	19	8.09
110	E70	60	D	13.55	76	13.18	61	9.93		N/A
111	C51	60	F	13.52	91	12.36	92	8.59		N/A
112	C8	52	B	13.51	69	13.72	80	8.98		N/A
113	C30	49	E	13.50	124	10.45	126	7.50	62	6.10
114	E71	59	C	13.49	101	11.71	108	8.08	67	6.08
115	E96	57	B	13.45	92	12.36	69	9.49		N/A
116	E14	65	D	13.39	126	10.44	145	6.70	79	5.83
117	C89	34	D	13.37	166	7.98	138	7.10		N/A
118	E100	59	B	13.28	122	10.56		N/A		N/A
119	E103	62	E	13.27	141	10.07		N/A		N/A
120	E35	58	C	13.24	151	9.28	147	6.65	119	4.42
121	E44	53	F	13.17	107	11.53	149	6.56	88	5.38
122	E107	69	F	13.05	103	11.61	135	7.17	56	6.31
123	C4	86	C	13.00	52	14.91	48	10.56		N/A
124	E47	57	B	12.94		N/A		N/A		N/A
125	C17	52	C	12.93	114	11.21	94	8.54	100	5.01
126	E3	78	D	12.81	84	12.77	77	9.21	41	6.86
127	E85	46	B	12.74	100	11.77	93	8.54		N/A
128	E95	46	C	12.71	123	10.54	130	7.34	121	4.36
129	C87	42	D	12.50		N/A		N/A		N/A
130	E67	73	C	12.11	131	10.29	109	8.05	50	6.61
131	E23	48	F	12.03	105	11.56	127	7.47	103	4.93
132	C29	63	A	12.01	71	13.51	100	8.42	83	5.72
133	E9	25	E	11.95	167	7.96		N/A		N/A
134	C60	56	B	11.83	120	10.61	104	8.33	38	7.00
135	E90	52	A	11.78	118	10.76	86	8.86		N/A
136	E104	62	F	11.67	85	12.75		N/A		N/A
137	E99	65	D	11.63	40	15.86	21	12.97		N/A
138	C9	41	A	11.57	135	10.22	134	7.21	78	5.88
139	C1	69	D	11.47	128	10.38	102	8.39		N/A
140	C26	47	E	11.36		N/A		N/A		N/A
141	E2	62	D	11.33%	108	11.36%	106	8.21 %	96	5.20 %
142	E89	35	B	11.30	15	19.93	26	12.64		N/A
143	E57	64	A	11.18	81	12.80	84	8.88	42	6.85

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
144	E84	35	F	11.09	115	11.13		N/A		N/A
145	E97	61	E	11.07	168	7.94	156	6.38	102	4.96
146	C83	34	D	10.85	145	9.57	123	7.54		N/A
147	C50	52	F	10.70	138	10.11	154	6.48	92	5.30
148	C86	42	E	10.69	137	10.15	75	9.26	34	7.24
149	C101	56	D	10.48		N/A		N/A		N/A
150	C53	53	F	10.33	102	11.66		N/A		N/A
151	C16	58	C	10.28	154	9.23	157	6.29	112	4.62
152	C75	62	E	10.21	132	10.29	115	7.70	85	5.54
153	E59	51	D	10.16	112	11.23	103	8.35	101	5.00
154	C27	50	D	10.07	149	9.30	118	7.67		N/A
155	E28	34	A	9.98	159	8.46	140	7.04	116	4.57
156	C12	72	F	9.84	169	7.71	161	5.76		N/A
157	E80	29	C	9.72	94	12.22	55	10.25	80	5.79
158	C7	9	A	9.62	146	9.52	143	6.96	127	3.86
159	C6	33	D	9.62	143	9.62	137	7.14	108	4.81
160	E32	49	C	9.61	160	8.41	90	8.76	90	5.36
161	C20	28	E	9.54	153	9.24	168	5.16	123	4.20
162	C39	43	E	9.46	152	9.26	124	7.52	133	2.14
163	C48	37	D	9.19	125	10.45	116	7.70	33	7.25
164	E82	37	F	9.18	170	7.60	133	7.21		N/A
165	E77	52	E	8.91	136	10.19	112	7.90	109	4.80
166	C64	32	E	8.85	173	7.13	153	6.50	70	6.00
167	E39	42	E	8.75	157	8.95	141	7.03	122	4.33
168	E86	64	C	8.69	113	11.22		N/A		N/A
169	C88	36	D	8.64	150	9.30	128	7.42	71	5.98
170	C3	59	B	8.54	164	8.21	164	5.42	89	5.37
171	E106	41	E	8.50		N/A		N/A		N/A
172	C78	45	E	8.17	162	8.33	158	6.05	132	2.89
173	E92	61	F	7.92	133	10.27	111	8.03	29	7.56
174	C5	32	D	7.78	163	8.24	139	7.05	60	6.20
175	E17	57	B	7.58	144	9.60	132	7.24	43	6.81
176	E13	39	E	7.48	181	6.16	171	4.98	94	5.28
177	C19	43	D	7.43	183	6.03	159	5.86		N/A
178	E31	53	A	7.40	139	10.07	122	7.59		N/A
179	C41	70	D	7.21	142	9.83	66	9.58	36	7.05
180	C80	65	F	7.19	121	10.60	146	6.69	124	4.10
181	C73	46	F	7.17	156	9.07	113	7.86		N/A
182	C79	55	D	6.63	171	7.54	151	6.54		N/A
183	C91	46	F	6.63	182	6.08	163	5.46	107	4.83
184	E83	43	F	6.59	176	6.84	144	6.88		N/A
185	C47	50	D	6.56	180	6.20	173	4.39	106	4.84
186	C81	77	C	6.09%	79	12.91%		N/A %		N/A %
187	C36	40	E	6.05	165	8.05	166	5.28		N/A
188	C92	22	E	5.92	161	8.35	129	7.35		N/A
189	C49	49	D	5.83	177	6.68	167	5.20	131	3.19
190	C96	49	B	5.60	99	11.88	82	8.90		N/A
191	C33	48	F	5.43	184	5.72	170	5.10		N/A
192	E78	40	D	5.27	172	7.44	148	6.59	86	5.48
193	E41	34	D	5.07	178	6.59	165	5.34		N/A
194	C59	43	B	4.75		N/A		N/A		N/A
195	E22	42	D	4.54	187	5.05	160	5.79	82	5.74

ALL ENDOWMENT POOLS (CONT.)

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
196	C67	19	E	4.53	158	8.47	120	7.64	105	4.87
197	C61	43	A	4.31	179	6.42		N/A		N/A
198	C90	5	C	3.02		N/A		N/A		N/A
199	C69	43	F	2.44	174	7.11	152	6.53		N/A
200	C85	41	E	1.74	175	6.90	114	7.72	73	5.95
201	C84	33	C	1.72	186	5.35	174	4.36	118	4.51
202	C10	93	F	1.25	189	4.32	176	4.21		N/A
203	C32	19	C	0.51	190	4.19	169	5.11	84	5.69
204	C37	22	F	-0.20	188	4.74	175	4.24		N/A
205	E102	54	C	-1.28		N/A		N/A		N/A
206	E7	31	F	-2.00	192	3.38	181	1.06		N/A
207	E60	68	D	-2.65	191	3.89	177	3.86	130	3.49
208	E87	11	F	-3.39	193	1.05	172	4.79	126	4.06
209	E88	19	F	-5.10	194	-0.76	179	2.93	120	4.38
	LEH-KUHN			-9.53		-1.91		1.64		N/A
	COM-FDBD	0	B	-9.90		-0.59		N/A		N/A
	SALOMON			-14.11		-4.05		0.06		3.22
AVERAGE		209		14.64 %	194	12.49 %	181	9.06 %	133	6.45 %